

Memorandum

**DATE:** May 21, 2006

To: Terry Reckord, MacLeod Reckord

**FROM:** Michael J. Read, P.E.

Transportation Engineering Northwest, LLC

**RE:** Burke-Gilman Trail (BGT) – Crossing Treatment Recommendations at BGT

and NE 165<sup>th</sup> Street Intersection System - Draft

We have completed our review of right-of-way, signage, and traffic control recommendations of the Burke-Gilman Trail and NE 165<sup>th</sup> Street crossing and intersection system as part of our work on the Burke-Gilman Trail Redevelopment Plan in Lake Forest Park, WA. Our review included a review of previous recommendations prepared by The Transpo Group (May 16, 2005), in *Burke-Gilman Trail Crossing Plan*, the *Manual of Uniform Traffic Control Devices* (MUTCD), 2003, the *Pedestrian Facilities Guidebook*, WSDOT, 1997, the Washington Administrative Code (WAC), and other various national reference documents on planning and guidance of pedestrian/bicycle facility design.

We concur with the findings and recommendations of both sight distance and traffic control at the BGT and NE 165<sup>th</sup> Street intersection system from the *Burke-Gilman Trail Crossing Plan*, which entail elimination of stop signs for bicycles and trail users and continued stop sign control for all vehicle movements approaching the trail and intersection (see Figure 12 of the *Burke-Gilman Trail Crossing Plan*. Subsequent design refinement of the trail and adjacent pedestrian circulation system however, results in a pedestrian crossing of the Burke-Gilman Trial along NE 165<sup>th</sup> Street. Research was conducted of both legal and traffic engineering guidance of "right-of-way" for this crosswalk of the Burke-Gilman Trail. It was determined, that whether the crosswalk is marked or unmarked, under **WAC 132N-156-430 Pedestrian right of way**, the operator of a vehicle (in this case a nonmotorized vehicle or bicycle) shall yield the right of way, slowing down or stopping if need be, to any pedestrian crossing any street, roadway, fire lane, or pathway with or without a marked crosswalk.

As the proposed "classification" of the BGT in the context of the transportation system, through its utilization, volume, and characteristic, is recommended to be considered "the major street" at nearly all crossings within Lake Forest Park (through the elimination of stop control of trail users), then as with all other pedestrian rights-of-way afforded under State law, trail users must stop or yield for pedestrian crossings of the trail, whether marked or unmarked. Installation of standard pedestrian crossing signs across the trail and installation of Bicycles Yield to Peds (R9-6) signage is recommended on the trail approaches to NE  $165^{\rm th}$  Street.

Given the concern of vehicle/bicycle and pedestrian conflict at this particular crossing of the BGT, TENW examined the potential installation of an active warning system for approaching vehicles and pedestrians in the crosswalk of this BGT trail crossing. The active

warning system uses an infrared technology that senses motion within trail approaches and activates yellow flashing beacons to approaching drivers of trail activity. While this system does enhance safety at certain types of trail crossings, its benefit are mostly targeted where adequate sight distance cannot be achieved for either approaching vehicles or trail users. Redevelopment of the BGT through this project will achieve appropriate sight distance for both vehicle and trail users. The potential for false triggers of the warning system or misalignment of the motion sensors could also cause confusion or safety issues for normal users of the crossing that rely on the system to detect trail activity. As such, no active warning system is advised at this or other trail crossings along Burke-Gilman trail at this time.